Appl. No. 10/617,738 Docket No.: 14397

This listing of claims will replace all prior versions, and listings, of claims in the application:

## CLAIMS

1. (currently amended) An apparatus for producing a vacuum, comprising: [[a]] an upper closed vessel having a gas inlet means, liquid inlet means and liquid outlet means; a gas inlet into said closed vessel from an area wherein at least a partial vacuum is to be created; an open vessel[[,]] arranged in vertical spaced relationship below said upper closed vessel, and having liquid inlet means, gas outlet means and liquid outlet means; tubular means extending between said liquid outlet means in said upper closed vessel and said liquid inlet means in said open vessel so as to provide a fluid flowpath therebetween; pump means between said liquid outlet means in said open vessel and said liquid inlet means in said <a href="mailto:upper">upper</a> closed vessel arranged so as to circulate liquid from said open vessel to said upper closed vessel; [[and]] aerator means in said upper closed vessel arranged so as to entrain gas from said gas inlet means in [[said]] the liquid flowing in [[said]] the fluid flowpath between said upper closed vessel and said open vessel; and means for opening said gas inlet means to admit gas from the area wherein at least a partial vacuum is to be created into said

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upper closed vessel such that the gas may be entrained in the liquid therein by way of said aerator means and so that at least a partial vacuum is created at the vacuum area.

- 2.(currently amended) An apparatus as claimed in claim 1
  wherein said tubular means comprises includes a pipe in the range
  20-40 feet long.
- 3.(original) An apparatus as claimed in claim 2 wherein said pump means is driven by a motor in the range of 12-15H P.
- 4. (currently amended) An apparatus as claimed in claim 1 wherein [[said]] the liquid is water and [[said]] the gas is air.
- 5. (currently amended) A method for creating a vacuum comprising:

  providing a closed upper vessel having a gas inlet

  means, liquid inlet means and liquid outlet means[[;]], a

  gas inlet into the closed vessel from an area in which at

  least a partial vacuum is to be created, an open vessel[[,]]

  arranged in vertical spaced relationship below [[said]] the

  closed vessel[[,]] and having liquid inlet means, gas outlet

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means and liquid outlet means[[;]] \_ tubular means between [[said]] the liquid outlet means in [[said]] the closed vessel and [[said]] liquid inlet means in [[said]] the open vessel so as to provide a fluid flowpath therebetween[[;]] \_ pump means between [[said]] the liquid outlet means in [[said]] the open vessel and [[said]] the liquid inlet means in [[said]] the closed vessel arranged so as to circulate liquid from [[said]] the open vessel to [[said]] the closed vessel[[; and]] \_ aerator means in [[said]] the closed vessel arranged so as to entrain gas from [[said]] the gas inlet means in [[said]] the liquid flowing in [[said]] the fluid flowpath between [[said]] the closed vessel and [[said]] the open vessel[[;]] , and means for opening said gas inlet means to admit gas into said closed vessel such that the gas may be entrained in the liquid therein by way of the aerator means and so that at least a partial vacuum is created at the vacuum area;

operating said pump means so as to raise liquid from [[said]] the open vessel to a level adjacent an upper end of said the aerator means within the closed vessel and circulate liquid through said along the fluid flowpath;

operating said means for opening said gas inlet means so as to admit gas from the vacuum area to [[said]] the

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aerator means and thereby become entrained in said entrain the gas into the liquid flowing in [[said]] the fluid flowpath; and

releasing [[said]] <u>the</u> entrained gas from [[said]] <u>the</u> open vessel.

6.(currently amended) A method as claimed in claim 5 wherein [[said]] the liquid is water and [[said]] the gas is air.